

## STIC Biotechnology Systems Branch

### RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/639,076A  
Source: 1FW/6  
Date Processed by STIC: 1/6/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

## Raw Sequence Listing Error Summary

### ERROR DETECTED

### SUGGESTED CORRECTION

SERIAL NUMBER:

10/639,076A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length     The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
- 4      Non-ASCII     The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
- 5   J   Variable Length     Sequence(s) 101,103,109 contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)           . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7      Skipped Sequences  
    (OLD RULES)     Sequence(s)          missing. If intentional, please insert the following lines for **each** skipped sequence:  
                          (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                          (i)     SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                          (xi)  SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                          This sequence is intentionally skipped  
  
                          Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)     Sequence(s)          missing. If **intentional**, please insert the following lines for **each** skipped sequence.  
                          <210> sequence id number  
                          <400> sequence id number  
                          000
- 9      Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
                          Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.  
                          In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
- 10      Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
- 11      Use of <220>     Sequence(s)          missing the <220> "Feature" and associated numeric identifiers and responses.  
                          Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
                          (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13      Misuse of n/Xaa     "**n**" can **only** represent a single nucleotide; "**Xaa**" can **only** represent a single amino acid

**Does Not Comply**  
**Corrected Diskette Needed**  
6-8

pp 6-8

## RAW SEQUENCE LISTING

DATE: 01/06/2006

PATENT APPLICATION: US/10/639,076A

TIME: 12:49:49

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\01062006\J639076A.raw

```

72 1          5          10
75 <210> SEQ ID NO: 4
76 <211> LENGTH: 13
77 <212> TYPE: PRT
78 <213> ORGANISM: Artificial Sequence
80 <220> FEATURE:
81 <223> OTHER INFORMATION: Synthetic peptide sequence
83 <400> SEQUENCE: 4
85 Trp Glu Val Leu Cys Trp Thr Trp Glu Thr Cys Glu Arg
86 1          5          10
89 <210> SEQ ID NO: 5
90 <211> LENGTH: 13
91 <212> TYPE: PRT
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Synthetic peptide sequence
97 <400> SEQUENCE: 5
99 Trp Glu Val Val Cys Trp Thr Trp Glu Thr Cys Glu Arg
100 1          5          10
103 <210> SEQ ID NO: 6
104 <211> LENGTH: 15
105 <212> TYPE: PRT
106 <213> ORGANISM: Artificial Sequence
108 <220> FEATURE:
109 <223> OTHER INFORMATION: Synthetic peptide sequence
111 <400> SEQUENCE: 6
113 Ser Glu Glu Trp Glu Val Leu Cys Trp Thr Trp Glu Asp Cys Arg
114 1          5          10          15
117 <210> SEQ ID NO: 7
118 <211> LENGTH: 14
119 <212> TYPE: PRT
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Synthetic peptide sequence
125 <400> SEQUENCE: 7
127 Glu Glu Trp Glu Val Leu Cys Trp Thr Trp Glu Asp Cys Arg
128 1          5          10
131 <210> SEQ ID NO: 8
132 <211> LENGTH: 13
133 <212> TYPE: PRT
134 <213> ORGANISM: Artificial Sequence
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Synthetic peptide sequence
139 <400> SEQUENCE: 8
141 Glu Trp Glu Val Leu Cys Trp Thr Trp Glu Asp Cys Arg
142 1          5          10
145 <210> SEQ ID NO: 9
146 <211> LENGTH: 12
147 <212> TYPE: PRT

```

## RAW SEQUENCE LISTING

DATE: 01/06/2006

PATENT APPLICATION: US/10/639,076A

TIME: 12:49:49

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\01062006\J639076A.raw

148 <213> ORGANISM: Artificial Sequence  
150 <220> FEATURE:  
151 <223> OTHER INFORMATION: Synthetic peptide sequence  
153 <400> SEQUENCE: 9  
155 Trp Glu Val Leu Cys Trp Thr Trp Glu Asp Cys Arg  
156 1 5 10  
159 <210> SEQ ID NO: 10  
160 <211> LENGTH: 11  
161 <212> TYPE: PRT  
162 <213> ORGANISM: Artificial Sequence  
164 <220> FEATURE:  
165 <223> OTHER INFORMATION: Synthetic peptide sequence  
167 <400> SEQUENCE: 10  
169 Glu Val Leu Cys Trp Thr Trp Glu Asp Cys Arg  
170 1 5 10  
173 <210> SEQ ID NO: 11  
174 <211> LENGTH: 10  
175 <212> TYPE: PRT  
176 <213> ORGANISM: Artificial Sequence  
178 <220> FEATURE:  
179 <223> OTHER INFORMATION: Synthetic peptide sequence  
181 <400> SEQUENCE: 11  
183 Val Leu Cys Trp Thr Trp Glu Asp Cys Arg  
184 1 5 10  
187 <210> SEQ ID NO: 12  
188 <211> LENGTH: 8  
189 <212> TYPE: PRT  
190 <213> ORGANISM: Artificial Sequence  
192 <220> FEATURE:  
193 <223> OTHER INFORMATION: Synthetic peptide sequence  
195 <400> SEQUENCE: 12  
197 Cys Trp Thr Trp Glu Asp Cys Arg  
198 1 5  
201 <210> SEQ ID NO: 13  
202 <211> LENGTH: 9  
203 <212> TYPE: PRT  
204 <213> ORGANISM: Artificial Sequence  
206 <220> FEATURE:  
207 <223> OTHER INFORMATION: Synthetic peptide sequence  
209 <400> SEQUENCE: 13  
211 Cys Trp Thr Trp Glu Asp Cys Glu Arg  
212 1 5  
215 <210> SEQ ID NO: 14  
216 <211> LENGTH: 8  
217 <212> TYPE: PRT  
218 <213> ORGANISM: Artificial Sequence  
220 <220> FEATURE:  
221 <223> OTHER INFORMATION: Synthetic peptide sequence  
223 <400> SEQUENCE: 14

## RAW SEQUENCE LISTING

DATE: 01/06/2006

PATENT APPLICATION: US/10/639,076A

TIME: 12:49:49

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\01062006\J639076A.raw

```

225 Cys Trp Thr Trp Glu Asp Cys Glu
226 1 5
229 <210> SEQ ID NO: 15
230 <211> LENGTH: 9
231 <212> TYPE: PRT
232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Synthetic peptide sequence
237 <400> SEQUENCE: 15
239 Cys Trp Thr Trp Glu Thr Cys Glu Arg
240 1 5
243 <210> SEQ ID NO: 16
244 <211> LENGTH: 8
245 <212> TYPE: PRT
246 <213> ORGANISM: Artificial Sequence
248 <220> FEATURE:
249 <223> OTHER INFORMATION: Synthetic peptide sequence
251 <400> SEQUENCE: 16
253 Cys Trp Thr Trp Glu Thr Cys Glu
254 1 5
257 <210> SEQ ID NO: 17
258 <211> LENGTH: 16
259 <212> TYPE: PRT
260 <213> ORGANISM: Artificial Sequence
262 <220> FEATURE:
263 <223> OTHER INFORMATION: Synthetic peptide sequence
265 <400> SEQUENCE: 17
267 Glu Trp Glu Val Leu Cys Trp Thr Trp Glu Thr Cys Glu Arg Gly Glu
268 1 5 10 15
271 <210> SEQ ID NO: 18
272 <211> LENGTH: 18
273 <212> TYPE: PRT
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: Synthetic peptide sequence
279 <400> SEQUENCE: 18
281 Glu Glu Trp Glu Val Leu Cys Trp Thr Trp Glu Thr Cys Glu Arg Gly
282 1 5 10 15
285 Glu Gly
289 <210> SEQ ID NO: 19
290 <211> LENGTH: 24
291 <212> TYPE: PRT
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Synthetic peptide sequence
297 <400> SEQUENCE: 19
299 Glu Glu Trp Glu Val Leu Cys Trp Thr Trp Glu Thr Cys Glu Arg Gly
300 1 5 10 15
303 Glu Gly Gly Gly Gly Ser Gly Gly

```

## RAW SEQUENCE LISTING

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TIME: 12:49:49

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\01062006\J639076A.raw

```

304          20
307 <210> SEQ ID NO: 20
308 <211> LENGTH: 13
309 <212> TYPE: PRT
310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:
313 <223> OTHER INFORMATION: Synthetic peptide sequence
315 <400> SEQUENCE: 20
317 Cys Trp Thr Trp Glu Thr Cys Glu Arg Gly Glu Gly Gln
318 1          5          10
321 <210> SEQ ID NO: 21
322 <211> LENGTH: 16
323 <212> TYPE: PRT
324 <213> ORGANISM: Artificial Sequence
326 <220> FEATURE:
327 <223> OTHER INFORMATION: Synthetic peptide sequence
329 <400> SEQUENCE: 21
331 Glu Val Trp Glu Val Leu Cys Thr Asp Trp Glu Ser Cys Glu Trp Gly
332 1          5          10          15
335 <210> SEQ ID NO: 22
336 <211> LENGTH: 13
337 <212> TYPE: PRT
338 <213> ORGANISM: Artificial Sequence
340 <220> FEATURE:
341 <223> OTHER INFORMATION: Synthetic peptide sequence
343 <400> SEQUENCE: 22
345 Trp Glu Val Leu Cys Met Asp Trp Glu Thr Cys Glu Arg
346 1          5          10
349 <210> SEQ ID NO: 23
350 <211> LENGTH: 15
351 <212> TYPE: PRT
352 <213> ORGANISM: Artificial Sequence
354 <220> FEATURE:
355 <223> OTHER INFORMATION: Synthetic peptide sequence
357 <400> SEQUENCE: 23
359 Glu Glu Trp Glu Val Leu Cys Trp Thr Trp Glu Thr Cys Glu Arg
360 1          5          10          15
363 <210> SEQ ID NO: 24
364 <211> LENGTH: 13
365 <212> TYPE: PRT
366 <213> ORGANISM: Artificial Sequence
368 <220> FEATURE:
369 <223> OTHER INFORMATION: Synthetic peptide sequence
371 <400> SEQUENCE: 24
373 Trp Lys Val Leu Cys Ala Thr Trp Ala Thr Cys Gln Arg
374 1          5          10
377 <210> SEQ ID NO: 25
378 <211> LENGTH: 13
379 <212> TYPE: PRT

```

<210> 101  
 <211> 9  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Synthetic peptide sequence

<220>  
 <221> MISC\_FEATURE  
 <222> (1)..(1)  
 <223> Xaa is absent or 1-100 amino acids

*variable length not permitted  
 (see item 5 on Eno summary  
 sheet)*

<220>  
 <221> DISULFID  
 <222> (2)..(2)

<220>  
 <221> MISC\_FEATURE  
 <222> (3)..(7)  
 <223> Xaa is any amino acid

<220>  
 <221> DISULFID  
 <222> (8)..(8)

<220>  
 <221> MISC\_FEATURE  
 <222> (9)..(9)  
 <223> Xaa is absent or 1-100 amino acids

*same eno*

<400> 101

Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa  
 1 5

*This eno also appears in sequence 103 and  
 109*



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7

<210> 106  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223>

Peptide

← insufficient explanation (quite source of  
genetic material)

see item 11 on Error  
summary  
sheet

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/639,076A

DATE: 01/06/2006  
TIME: 12:49:50

Input Set : A:\Sequence Listing.txt  
Output Set: N:\CRF4\01062006\J639076A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

\Seq#:101; Xaa Pos. 1,3,4,5,6,7,9  
Seq#:102; Xaa Pos. 1,2,3,4,5,6,8,9,10,11,12,14,15,16,17,18  
\Seq#:103; Xaa Pos. 1,3,5  
Seq#:104; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20  
Seq#:105; Xaa Pos. 1,2,3,4,6,7,10,11,12,13,15,16,17,18  
Seq#:106; Xaa Pos. 1,5,8,11,13,14,15,16,17,18  
Seq#:107; Xaa Pos. 1,5,8,11,13  
Seq#:108; Xaa Pos. 1,2,3,7,10,13,15,16,17,18,19,20  
\Seq#:109; Xaa Pos. 1,2,3,4,5,6,8,9,10,11,12,14

**VERIFICATION SUMMARY**

DATE: 01/06/2006

PATENT APPLICATION: US/10/639,076A

TIME: 12:49:50

Input Set : A:\Sequence Listing.txt

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L:1752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0  
L:1827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:102 after pos.:0  
M:341 Repeated in SeqNo=102  
L:1862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:0  
L:1882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:104 after pos.:0  
M:341 Repeated in SeqNo=104  
L:1921 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:105 after pos.:0  
M:341 Repeated in SeqNo=105  
L:1965 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:106 after pos.:0  
M:341 Repeated in SeqNo=106  
L:2009 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0  
L:2049 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108 after pos.:0  
M:341 Repeated in SeqNo=108  
L:2103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:0